

CLAIMS

What is claimed is:

1. An improved flexible hose (10) comprising a flexible material (14) and a reinforcing rod (12) positioned externally of the flexible material (14), the flexible material (14) being formed with terminal ends (18), the improvement being characterized by:

5 the reinforcing rod (12) having at least one terminal end (16) being located short of the terminal ends (18) of the flexible material (14), the flexible material (14) thus becoming a soft cuff (20) adapted to be received by a hose fitting.

- 10 2. An improved flexible hose (10) in accordance with claim 1, wherein the hose (10) is further characterized by an imprinted indent (50) extending through the soft cuff (20).

- 15 3. An improved flexible hose (10) in accordance with claim 2, wherein the reinforcing rod (12) is wound at a pitch externally of the flexible material (14) and the indent (50) is wound at a pitch greater than the pitch of the reinforcing rod (12).

- 20 4. An improved method of manufacturing a hose (10) comprising
a) rotating a mandrel (30)
b) feeding a length of material (42) onto the mandrel (30) as the mandrel (30) rotates, to build a hose length (32) on the mandrel (30),
c) feeding a second length of material in the form of a reinforcing rod (12) onto the mandrel (30) as the mandrel (30) rotates to form a helical reinforcing rod (12) on the hose length (32), and
d) curing the hose length (32),

25 the improvement being characterized by:

prior to feeding the reinforcing rod (12) onto the mandrel (30), modifying the hose length (32) to create non-adhesive regions (46).

- 30 5. An improved method of manufacturing a hose (10) in accordance with claim 4, the method being further characterized by applying a third material (44) to the hose length (32) to create the non-adhesive regions (46).

6. An improved method of manufacturing a hose (10) in accordance with claim 4, the method being further characterized by cutting the hose length (32) in the non-adhesive

regions (46).

7. An improved method of manufacturing a hose (10) in accordance with claim 4, the method being further characterized by varying the speed at which the mandrel (30) rotates as the reinforcing rod (12) is feed onto the mandrel (30) at the non-adhesive regions (46).
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8. An improved method of manufacturing a hose (10) in accordance with claim 4, the method being further characterized by reducing the winding tension of the reinforcing rod (12) as the reinforcing rod (12) is feed onto the mandrel (30) at the non-adhesive regions (46).
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9. An improved flexible hose (10) made by any of the methods recited in claims 4-8.
- 15 10. A hose length (32) comprising at least one elastomeric layer (22 or 28) and a reinforcing rod (12) helically wound externally of the elastomeric layer (22), the improvement being characterized by:
non-adhesive regions (46) periodically spaced along the hose length (32).
- 20 11. A hose length (32) in accordance with claim 10, the hose length (32) being further characterized by the reinforcing rod (12) not being adhered to the at least one elastomeric layer (22 or 28) in the non-adhesive regions (46).
- 25 12. A hose length (32) in accordance with claim 10, the hose length (32) being further characterized by a rope (48) being wound adjacent to the reinforcing rod (12).
Rule 1.10(3)(4)
- 30 13. A hose length (32) in accordance with claim 10, the hose length being further characterized by the reinforcing rod (12) being wound at a greater pitch length in non-adhesive regions (46).
Rule 1.10(3)(4)
14. A hose length (32) in accordance with claim 10, the hose length being further characterized by the reinforcing rod (12) being wound at a lesser winding tension in the non-adhesive regions (46).
Rule 1.10(3)(4)